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DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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April 1, 1992

CERTIFIED RETURN RECEIPT REQUESTED
No. P 540 713 885

Mr. Robert Hagen, Director
Office of Surface Mining
Reclamation and Enforcement
Suite 310, Silver Square
625 Silver Avenue, S.W.
Albuquerque, New Mexico 87102

Dear Mr. Hagen:

Re: Ten-Day Notice X92-02-370-001 TV2, Sunnyside Mine, ACT/007/007, Carbon County, Utah

This letter responds to the above-referenced Ten-Day Notice (TDN), the certified copy of which was received at the Division's Offices on March 23, 1992.

Number 1 of 2 reads: "Failure to contemporaneously reclaim the coarse refuse pile. This applies to the level of the second terrace (counted from the bottom of the pile up) to the level of the fifth terrace." Regulations believed to have been violated: R645-300-143, R645-301-352, and 553.252.

Division Response: The TDN correctly identifies the contemporaneous reclamation commitment for the coarse refuse disposal area, Chapter III, page 38. The MRP is deficient as approved because the MRP does not recognize a commitment to utilize the coarse refuse as fuel for a cogeneration facility that is presently under construction. OSM has been kept verbally appraised of the cogeneration situation via telephone calls between Lowell Braxton and Robert Hagen (most recently March 3, 1992) regarding the need to pay AML fees on coarse refuse used for this purpose. Failure to reclaim as cited in this TDN is clearly not a violation of the Utah Program, given the ongoing construction of the EPC cogeneration facility, and OSM and Utah's knowledge of the source of fuel for the facility. The first part of this TDN should be dropped on this basis.

Given the above history, the Division recognizes the permit commitment to contemporaneously reclaim the coarse refuse disposal area is not consistent with the intent to use this resource as cogeneration fuel. To resolve this permit deficiency, the Division has ordered the operator to initiate contemporaneous reclamation of the coarse refuse disposal area or to amend the permit to authorize removal of the coarse refuse to the cogeneration facility for use as fuel, and to provide a schedule for the consumptive use of the refuse.

Number 2 of 2 reads: "Failure to properly design and construct impounding structures constructed of coal mine waste. East and West Slurry Cells." Regulations believed to have been violated: R645-301-746.311, 301,743.1, 746.312 and 746.340.

Division Response: The inadequacies in the East and West Slurry Cells were identified in a Division Order dated September 9, 1991, (copy enclosed). Correspondence between the operator and the Division subsequent to the Order, resulted in a partial submission of data February 26, 1992. Additional data were required by the Division and a March 31, 1992, deadline was established.

Since the problem was identified by the state, and rectification was progressing in advance of the oversight inspection, Number 2 of TDN 92-02-370-001 is redundant, and should be withdrawn.

Sincerely,

Lowell P. Braxton
Associate Director, Mining

vb
Enclosure
cc: D. Nielson
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pliance with UMC 817.92-93. The operating plan and evaluation will be presented to DOGM and MSHA prior to reactivation.

All surface drainage above ESC, WSC, and the coarse refuse embankment is diverted away from embankments by stabilized diversion channels designed to pass a 100-year, 24-hour precipitation event (Plate III-27). Calculations are found in Appendix III-1.

Visual inspections are conducted weekly by a qualified registered engineer or someone under his supervision to assess the stability of the impoundments and determine the amount of seepage if present. Piezometers installed in the East Slurry Cell embankment will be monitored weekly when water is present in the structure to assess the amount of embankment saturation. Records of the inspection findings and recommendations will be maintained at the mine site. If the inspection discloses that potential hazards exist, the Division will be informed promptly of the findings, the emergency procedures formulated for public protection, and remedial action measures that will be implemented.

Maintenance of the embankments will consist of filling and grading any erosion or other failure features discovered by weekly inspections.

Subsidence, mudflows, and landslides are not a problem because of the location of the embankments. Possibility of failure below the embankments is limited to thin layers of colluvial material on bedrock that would not not threaten the embankments.

Reclamation of the slurry cells should pose little problem because the slurry material can be driven over after the material has dried for a short period of time.

(b) Coarse refuse

Coarse refuse or reject from the preparation plant is disposed of in a coarse refuse waste embankment. The refuse is hauled by truck from the refuse loadout at the preparation plant to the coarse refuse pile (Plate III-1) where it is end dumped in piles. When sufficient material has been hauled to the dump, the refuse is spread out in a 24-inch horizontal layer by a dozer. Loaded haul trucks transporting the next layer of refuse randomly compact the previous surface to prevent fires and increase the stability of the structure. The outer slope of the refuse pile is maintained at a 27 degree slope (see Plate III-5). At 50 feet vertical increments, a 20-foot wide terrace is constructed for water runoff and erosion control. A geotechnical study was com-

pleted on the coarse refuse embankement and results compiled in Appendix III-1.

After the coarse refuse bank is completed, the surface will be covered with a minimum of 4-feet of non-toxic and non-combustible borrow material from nearby borrow pits. Vegetation will be planted to minimize surface erosion. Test plots are being used to determine the minimum soil depth required to revegetate the refuse pile (see Section 3.5). If results show that less than 4-feet of material can be used, the operator will request the amount of cover be reduced and the amount of bond reduced accordingly.

The coarse refuse pile is inspected on a quarterly basis by a registered engineer or other qualified person under his direction to check slopes, seepage, and other visible indications of potential failure. The results of the inspections will be recorded and maintained at the mine site. If any inspection discloses any potential hazards, the Division will be informed of the findings and of the emergency procedures formulated for public protection and remedial action.

Maintenance of the embankments will consist of filling and grading any erosion or other failure features discovered during weekly inspections. Ditches on the terraces will be cleaned and graded as needed. Rip rap in the drainage system will be repaired as needed.

Subsidence, mudflows, rock debris falls, or landslides are not expected to be a problem because of the topographical location. Possibility of failure below the embankments is limited to thin layers of colluvial material on bedrock that would not not threaten the embankments.

(c) Return of coal processing waste to underground workings

No coal processing waste is to be returned to abandoned underground workings during the permit period.

In the late 1950's and early 1960's a backfill plant was constructed to crush a portion of the preparation plant reject and pump the reject underground to fill air courses that were no longer needed and to fill voids above yieldable arch installations. Approximately 700,000 tons of material were pumped underground. The backfill equipment (crushers, screens, rod mill, pumps, etc.) have been removed and the building is now used as a warehouse for preparation plant equipment and materials. The backfilling was done to stabilize main access and ventilation entries and to lessen the occurrence of bumps in such areas.

(d) Underground development waste

The bulk of underground development waste generated by the mining operation at Sunnyside Mines is disposed of in mined-out areas underground. If the rock waste shows unacceptable levels of acidity or toxicity, the rock waste will be mixed with acceptable waste to achieve overall acceptable levels of acidity or toxicity, or hydrologically isolated from the rest of the mine with solid block seals. The operator will submit a map to the Division showing where the material will be placed and the locations of the block seals.

Any underground development waste not disposed of underground will be placed in the coarse refuse pile with the coal processing waste. There is no separate disposal structure for the underground development waste on the surface.

Each geological stratums above and below the coal seam to be mined has been tested for SAR, pH, boron, and acid-base potential (see Section 6.6.3.2 and Table 6.2). Adverse levels for SAR, pH, boron and acid-base potential are defined as: SAR values greater than 10, pH less than 5 or greater than 9, boron greater than 5 PPM, and acid base potential less than -5 tons $CaCO_3$ equivalent per 1000 tons material.

(e) Industrial waste

Non-coal waste is disposed in the East Carbon City landfill or the industrial waste dump.

Material placed in the industrial waste dump is primarily reject from the rotary breaker such as timbers, empty cans or other non-coal waste that comes out on the mine belt. The industrial waste dump has been approved by the State Board of Health (Figure III-2). It is located at the northeast end of the East and West Slurry Pond Cells of the refuse disposal area (Plate III-1). The dump was constructed and is used by excavating a trench, compacting the sides and bottom for a water barrier, filling the trench with non-coal waste and then covering the waste with a minimum of two feet borrow material.

The present industrial waste location has one to two years additional capacity. The operator will submit a new location to DOGM for approval after a new site has been located.

All other non-coal waste is sent to the East Carbon City landfill for disposal. The Authorization letter from East Carbon City (Figure III-7) allows the operator use of their landfill for disposal of non-industrial wastes.

3.4.9.2 Control Measures to Mitigate Impacts

Based on the characteristics, handling and disposal of various waste products discussed in Section 3.4.9.1 above, the impact of the environment is expected to be minimal.

The slurry refuse does not go into the hydrologic system.

The coarse refuse is covered with non-combustible waste material and compacted to eliminate ignition effect, if any, on the surface.

No additional waste facilities are planned, since the existing structures should have sufficient capacity to last throughout the proposed permit period.

3.5.1 Reclamation Plan

The reclamation and revegetation plans are designed to return the disturbed lands to productive uses once mining activities have ceased. These post-mine land uses will be the same as the current and pre-mine uses, i.e., fish and wildlife habitat, recreation, and livestock grazing.

The majority of the areas were disturbed prior to the Coal Mine Reclamation Act of 1977. The affected acreage of all disturbed areas is minimal. Because topsoil was not saved prior to the Act, many of these areas will be revegetated without topsoil. Although the plans utilize state-of-the-art reclamation methods, these plans will be revised as new materials and techniques become available.

Site stabilization and erosion control will be obtained through application of the reclamation and revegetation procedures described in Chapters III, VIII and IX. All of the techniques described are proven techniques, either through the operators' experience or from the literature.

3.5.1.1 Contemporaneous Reclamation

Contemporaneous reclamation has been ongoing at Sunnyside for many years. Although written records were not kept, we do know that plantings of crested wheatgrass began in the late 1950's. The streamsides have been reseeded along channelized

sections of Grassy Trail Creek, areas adjacent to roads and vacant areas next to buildings.

Variations in the coal market constantly affect the rate and occurence of mining activities, therefore it is not practical or possible to present a specific timetable for most reclamation activities. Very few contemporaneous reclamation activities are scheduled during this permit term. No final reclamation is planned at the end of the five year permit term. Timing of all reclamation activities will generally follow the sequential schedule presented in Table III-42. The revegetation process will be most successful by adhering to the revegetation schedule in Table III-26.

Areas adjacent to any future disturbances will be revegetated as part of contemporaneous reclamation. Contemporaneous reclamation includes:

(1) Slaughter Canyon Portal Area portal (P 19,) which provided access to the outside raise areas of the No. 1 Mine (Plate III-4) and the adjacent materials storage facility was not needed after early 1981. The portal was sealed in 1982 according to MSHA regulations. The portal and road area were both revegetated in 1983 according to the plan submitted to and approved by DOGM (Appendix III-4).

(2) Coarse Refuse Disposal Area (D2) (Plate III-5) is in a state of ongoing construction and reclamation. The pile is constructd in 50-foot vertical increments with 20 foot wide terraces constructed for water runoff and erosion control. Lifts are made in 2-foot increments of compacted refuse. Revegetation test plots of coarse refuse are being used to determine the amount and type of cover material necessary to support diverse and effective vegetative growth. After the material and depth of cover are approved by DOGM, cover and revegetation will begin on the slopes and will be ongoing throughout the life of the mine.

Disturbances created prior to the ACT are delineated on Plates III-20 through III-23. Typically these pre-law disturbances were revegetated with crested wheatgrass. The maps make clear the level of reclamation required as currently interpreted by the DOGM.

Those disturbed areas which have been revegetated prior to the ACT were mapped in the fall of 1983 and are also shown on Plates III-20 through III-23. These maps delineate pre-law areas which remain to be revegetated and will enable determination of the level of reclamation required for any pre-law areas which may be redisturbed.